

**ABSTRACT**

Methods of forming a continuous seed layer in a high aspect via and its associated structures are described. Those methods comprise forming a recess in  
5 a substrate, forming a non-continuous metal layer within the recess, activating the non-continuous metal layer and a plurality of non-deposited regions within the recess, electrolessly depositing a seed layer on the activated non-continuous metal layer and the plurality of non-deposited regions within the recess, and electroplating a metal fill layer over the seed layer, to form a substantially void-free metal filled  
10 recess.